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Reforming Dutch capital taxation

Lans Bovenberg and Harry ter Rele*

Abstract

One of the options in the Dutch cabinet white paper 'Taxation in the 21st century' is to replace the personal income tax on interest and dividend incomes and the wealth tax on bonds and shares by a schedular tax on a presumptive return to personal wealth. This article analyzes how these reform proposals affect tax distortions, employing the methodology developed by King and Fullerton. The proposed reform eliminates some forms of tax arbitrage. At the same time, the tax disadvantage of equity at the corporate level is no longer offset by the tax advantage of the exempt capital gain at the personal level. This provides a stronger tax incentive for corporations to finance their investments with debt. At a 25%-rate on a presumptive return of 4%, also individuals who invest in an unincorporated business or owner-occupied housing will find it more attractive to use debt rather than equity.

Samenvatting

Eén van de opties in de nota van het demissionaire kabinet 'Belastingen in de 21e eeuw' is het vervangen van de synthetische inkomstenbelasting op rente- en dividendinkomsten door een forfaitaire vermogensrendementsheffing. Dit artikel analyseert hoe deze hervormingsvoorstellen belastingdistorties beïnvloeden. Hierbij wordt gebruik gemaakt van de methodologie die is ontwikkeld door King en Fullerton. De belastingvoorstellen blijken een eind te maken aan sommige vormen van belastingarbitrage. Tegelijkertijd creëert het nieuwe stelsel bepaalde distorties. Zo wordt bijvoorbeeld het fiscale nadeel van eigen vermogen op vennootschapsniveau niet langer gecompenseerd door het fiscale voordeel van onbelaste vermogensgroei op particulier niveau. Dit bevordert schuldfinanciering bij vennootschappen. Bij een 25%-tarief over een forfaitair rendement van 4% wordt financiering met vreemd vermogen ook aantrekkelijker voor particulieren met een eigen bedrijf of een eigen woning.

Introduction

An important component of the recent plans of the Dutch cabinet to reform the Dutch tax system is the proposed modification of the taxation of capital. This paper explores how these plans affect effective tax wedges on saving and investment. It distinguishes between various forms of saving and investment and covers the entire tax wedge between the pre-tax and after-tax returns. We focus on

how the plans affect the after-tax return on investments and the user cost of capital. The most important criterion in evaluating the proposals is tax neutrality. This article deals only with those incentives on saving- and investment decisions that originate in the tax system. Other factors, such as the risk premium, are ignored.¹

Methodology

The forms of savings and investments

This paper applies the methodology developed by King and Fullerton (KF) (1984) and extends this methodology in various ways. In particular, the calculations are not restricted to investments by corporations but also include investments by unincorporated businesses (the self-employed) and investments in owner-occupied dwellings. Moreover, unlike KF, we include investments in intangible assets, such as research and development, marketing and company training. These expenditures typically benefit from immediate expensing. We distinguish six types of households, depending on their investment strategy² and their marginal income- and wealth tax rates. Table 1 contains the relevant distinctions.

Table 1 Relevant distinctions

Assets	Legal form	Source of finance	Ownership
Machinery and equipment	Corporations	Debt	Households - conventional strategy (3 types) - innovative strategy (3 types)
Buildings	Unincorporated businesses (self-employed)	Equity (for corporations to be divided in new share issues and retained earnings)	Tax-exempt institutions
Intangible assets	Owner-occupied dwellings		

An outline of the methodology

Like KF, we focus on marginal investments. The taxation of marginal projects offers the best indication of the impact of the tax system on saving and investment incentives. Our methodology, which KF call the fixed-r approach, is based on two further major assumptions, namely, first, a fixed and exogenous real interest rate and, second, arbitrage at the level of the saver (i.e. the capital supplier). Figure 1 summarizes the methodology, which is explained in the rest of this subsection.

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Dutch shares being traded between domestic and foreign investors.

The present tax system

Real after-tax returns

The marginal tax wedge of the supplier of capital is the difference between the real interest rate and the real after-tax returns for the investor (see table 3). This marginal tax wedge depends on the marginal rates at which the investor is taxed under the personal income and wealth taxes. The real after-tax return for a traditionally investing household (i.e. a household investing in a debt claim) facing high marginal tax rates can be even negative, because the income tax taxes *nominal* returns (at a marginal rate of 60%, the income tax reduces the real net return by 3.6%-points (or 60% of 6%)). The wealth tax reduces the after-tax return further by 0.7%-point if household wealth exceeds the exemption for the wealth tax. By assumption, equity investments yield the same after-tax return at the margin.

Innovative investors can reduce the tax burden by letting interest income accumulate in a so-called capital growth fund in which they hold shares. The interest income accruing to these funds results in a capital gain for the household. This capital gain is exempt from personal income tax. The capital growth funds, however, are subject to corporate income tax. In this way, the marginal tax burden is reduced from the personal income tax rates (the top rate is 60%) to the corporate income tax rate of 35%. Table 2 illustrates the difference in after-tax returns between direct household savings and tax-exempt forms of saving. The tax-exempt forms yield a return that equals the real interest rate (column 4).

Debt-financed investments

Table 3 (last column) shows the cost of capital for debt financed investments. It indicates that the cost of capital is lower than the assumed real interest rate of 4%. The reasons for this associated implicit subsidy are: first, nominal (as opposed to real) deductibility of interest payments; second, accelerated tax depreciation (relative to economic

depreciation); and, third, an additional tax allowance on account of some immediate expensing of investment. The cost of capital for debt financed investments of the self-employed are lower than those of corporations for two reasons. First, the self-employed generally benefit to a greater extent from immediate expensing because this tax benefit is aimed at enhancing small investments. Second, the benefit of accelerated depreciation and of nominal deductibility of interest payments rises with the tax rate against which these allowances can be deducted. The relevant tax rate for the self-employed (the marginal personal income tax rate) exceeds that of corporations (the corporate tax rate).

Table 3 shows that the cost of capital is below the real interest rate also for debt financed investments in owner-occupied dwellings. The reasons for this are twofold. The first is that nominal interest payments are fully deductible for income tax purposes whereas the taxed imputed rent (1.25% of the value of the property) is generally substantially lower. The second reason is that owner-occupied dwellings are treated favorably under the wealth tax as they are valued at only 60% of their market value, while mortgage debt is fully deductible for the purpose of the wealth tax. Owner-occupiers face an additional tax in the form of a local property tax, which averages 0.3% of the value of the property.

Equity-financed investments

Table 3 contains the required real pre-tax returns also for equity financed investments. Traditional investors settle for a relatively low pre-tax return on investments of corporations with retained earnings. If their marginal personal income tax rate is 60%, the required return on retained earnings is only 1.1%. The reason for these low required returns is that an alternative investment, a debt claim yielding a nominal interest rate of 6%, is subject to a high personal income tax rate of 60%. Retained earnings, however, which are taxed under corporation tax, yield a capital gain. This capital gain is not taxed at the level of the individual shareholder.

Table 2 Real after-tax returns of households under the present tax system

Households			Tax exempt saving
low marginal rates ^a traditional/ innovative	average marginal rates ^a traditional/ innovative	high marginal rates ^a traditional/ innovative	
in % 1.8/1.9	1.2/1.5	-0.3/1.2	4.0

^a The low, average and high marginal income tax rates are, respectively 36.4%, 45% and 60%. The wealth tax rates for low, average and high are respectively 0%, 0.4% and 0.7%.

Table 3 Cost of capital under present tax system^b

	Equity ^a	of which: new shares	retained earnings	Debt
<i>Traditional investor facing average marginal tax rates^c</i>				
Corporations	2.9	6.1	2.6	3.0
Unincorporated businesses	2.2	-	-	2.2
Owner-occupied dwellings	2.0	-	-	2.0
<i>Traditional investor facing high marginal tax rates^c</i>				
Corporations	1.6	6.1	1.1	3.0
Unincorporated businesses	0.6	-	-	1.4
Owner-occupied dwellings	1.2	-	-	1.2
<i>Innovative investor facing high marginal tax rates^c</i>				
Corporations	3.3	6.1	3.0	3.0
Unincorporated businesses	3.1	-	-	1.4
Owner-occupied dwellings	2.7	-	-	1.2
<i>Tax exempt institution</i>				
Corporations	5.9	6.1	5.9	3.0

^a The investments of corporations that are financed with equity are assumed to consist of 90% retained earnings and 10% new shares.

^b The assets consist of a) machinery and equipment b) buildings, and c) intangible assets. The weights of these three categories are derived from CPB (1996) and are respectively 47%, 31% and 22%.

^c The average and high marginal income tax rates are respectively 45% and 60%. The wealth tax rates for average and high are respectively 0.4% and 0.7%.

If the personal income tax rate of the marginal investor exceeds the corporate tax rate, the cost of capital of retained earnings is below that of debt. On the one hand, the return on retained earnings is taxed at the corporate level at the corporate tax rate while interest payments are deductible. On the other hand, unlike the return on debt, retained earnings are effectively exempt from personal income tax because of the absence of a capital gains tax. By retaining earnings within the corporation, the household can thus reduce the tax rate on its savings from the marginal personal income tax rate to the corporate tax rate.

The higher the personal income tax rate of the investor is, the larger is the tax advantage of retained earnings. Pension funds and life insurance companies require a higher return on profits retained by corporations than on debt because these institutions do not pay any personal income taxes on alternative investments.

The innovative investor who lets interest income accumulate in a capital growth fund reduces the taxation of debt financed investments to the corporate income tax. For this innovative investor, therefore, the required yield on debt equals that on retained earnings.

The second and third columns of Table 3 show the relevance of the distinction between retained earnings and new share issues for household investments in corporations. Investments financed with retained earnings feature a lower cost of capital than investments financed with new equity. This reflects the lower initial after-tax cost of the investment to the saver. In case of retained earnings, the initial cost amounts to the net dividends foregone. This is lower than the investment because dividends are subject to personal income tax. Investments with new shares require a higher return because the initial cost to the saver corresponds to the invested amount.

The lower costs of retained earnings imply that the cost of capital for equity of mature firms that generate sufficient retained earnings are relatively low compared to that of young, fast growing firms that require external equity to finance their investments. This hampers the transfer of capital between old and new firms and thereby the dynamics of the capital market.

A comparison between the second and third columns shows that the difference in return requirements between new shares and retained earnings is largest for investors featuring a high marginal rate of personal income tax. For these shareholders, the personal income tax on dividends weighs most heavily.

Tax-exempt institutions require almost the same yield on both forms of equity-investment because the asymmetry in personal taxation due to personal income taxes on dividends plays no role here. The slightly higher cost of new share issues is due to a minor tax on acquiring new capital.

The distinction between external and internal equity is not relevant for the self-employed and owner-occupied housing. Table 3 reveals that the present tax system hardly impacts the way a traditional investor finances a marginal investment in owner-occupied housing. The reason is that the after-tax financing costs of debt are close to the after-tax return on an alternative investment of the equity (on the (international) capital market); the income tax paid can typically be deducted at the same tax rate as the rate at which the interest on an alternative investment is taxed. For the self-employed, an equity financed investment is slightly more attractive than is a debt financed investment. This is due to the low rate of wealth taxation on equity of proprietorships compared to the tax on personal wealth outside the company.

The required return on owner-occupied housing and for the self-employed falls with higher rates of income

Table 4 Cost of capital for separate assets^a

	Equity	of which: new shares	retained earnings	Debt	Total
	in %				
Machinery and equipment	3.0	6.3	2.6	3.1	3.0
Buildings	3.5	6.8	3.1	3.6	3.5
Intangible assets	2.0	4.6	1.7	2.1	2.0

^a The calculations assume corporate investments and conventional savers.

and wealth tax because the advantage of tax allowances is more substantial for individuals subject to high marginal tax rates.³

Differences between assets

Table 4 compares the specific taxation of various assets. Intangible assets are taxed favorably relative to machinery and buildings because of immediate expensing. Buildings require a slightly higher return due to a property tax on buildings at the company level.

Tax arbitrage

The difference between the required return by traditional investors on retained earnings and the real interest rate on the capital market measures the loss of tax revenue due to tax arbitrage. Individuals earning high labor incomes can borrow and deduct the nominal interest expenses at the top personal tax rate of 60% and invest the borrowed funds in shares of which the returns are not subject to personal income taxation (if the firm retains its earnings). The (lower) 35% corporate tax rate on retained earnings only partially makes up for this effect.

In the absence of external effects, this gap between the cost of capital on retained earnings and the real interest rate measures the welfare loss due to these arbitrage transactions; the benefits to society of these investments (i.e. the pre-tax rate of return) falls short of its cost to society (i.e. the real interest rate on the international capital market).

The government white paper

The most important proposals in the cabinet white paper with regard to the taxation of capital are the elimination of the wealth tax and the introduction of a schedular income tax. This schedular approach involves separating individual sources of income into three boxes, which are taxed separately.

Box I covers labor income, pension benefits and annuities, income of the self-employed, and income from owner-occupied housing. The sum of these forms of income is taxed at progressive rates. Most tax rates are slightly lower than under the present system due to a change in the tax mix to indirect taxes and some broadening of the income tax base.

Box II covers the profits of manager/shareholders of corporations. This category is not discussed in this article.

Individual income from capital that does not qualify for boxes I and II is placed in Box III. The cabinet proposes to tax this income at a proportional rate of around 25%. This rate will be imposed on a presumptive return on the value of the underlying personal wealth at an annual date of measurement. The tax base is thus not the income from capital but household wealth. According to the white paper, the cabinet is considering a presumptive return of around 4%. The rate of 25% on a presumptive return of 4% corresponds to an effective wealth tax of 1%. Some progressivity is introduced through a tax exemption of £ 37,500 for singles and £ 75,000 for a married couple.

The following calculations assume a tax rate of 25% on a presumptive return of 4%, as suggested by the cabinet. The presumptive return will be applied to the value of assets minus liabilities. Actual costs (including the costs of financing) are no longer deductible since the presumptive return is supposed to be a net return.

The effects of the options

The taxation of savings

The government plans raise the after-tax yields for most suppliers of capital (compare table 5 to table 2), especially for wealthy traditional investors with high personal incomes and wealth. This is due to a substitution of the wealth tax and the progressive personal income tax by a proportional rate of 25% (with a relatively small personal exemption) on a presumptive return of 4%. The schedular approach that taxes labor income in a box separate from capital income implies that the after-tax yields of households with different labor incomes no longer diverge. The higher after-tax yield from direct household savings implies that the disparity with the tax-favored forms of savings is reduced.

Debt-financed investments

The proposals have little impact on the cost of debt financed investments (compare the last columns of tables 6 and 3). The required return rises slightly for the self-employed and owner-occupied housing due to the somewhat lower personal income tax rates (in box I) at which the various allowances can be deducted. In addition, the elimination of the wealth tax results in a small rise of the cost of capital for owner occupied housing because this form of investment no longer benefits from its favorable treatment under the wealth tax.

Table 5 Real after-tax returns under cabinet proposals

Households		Life insurance policies	
Under tax exemption	Average ^a	In excess of tax exemption	
in %			
4.0	3.1	3.0	4.0

^a 10% of household wealth is assumed to be under the tax exemption at the margin.

Investments with retained earnings

The tax reforms do not affect the required yields of tax exempt institutions (compare tables 6 and 3) because the reforms apply to taxes these institutions do not pay, namely personal income tax and wealth tax.

Individuals who are currently subject to income- and wealth tax will require a higher pre-tax return on retained earnings than under the present tax system. The required return on retained earnings exceeds that on debt for all investors. The required yield of individual investors on retained earnings will rise because the tax at the personal level that affects only the return on debt (the personal income tax), is substituted by a tax (the presumptive capital income tax) that taxes both retained earnings (and the capital gain generated by it) and the return on debt. Thus, the tax discrimination of equity at the level of the corporation (in contrast to interest, the normal return on equity is not deductible for corporate tax purposes) is no longer offset by a tax advantage at the personal level (i.e. the tax exemption of capital gains). In contrast to debt, retained earnings are therefore taxed twice, viz. at the corporate level by the corporate tax and subsequently at the personal level on the basis of a presumptive return.

The higher required yield on retained earnings results in tax discrimination of equity compared to debt. This may lead to more debt financing by corporations that rely on resident shareholders for their equity capital. Shares of firms that rely also on foreign shareholders and tax exempt institutions for their equity capital will partially be sold to these investors.

Investments with new shares

The required yield on new shares does not change because the effect of the lower taxation of the alternative allocation of the capital (a debt claim) is offset by the elimination of the income tax on dividends. Dividends and capital gains are both taxed equally by the presumptive capital income tax. Hence, apart from the capital duty on paid-in capital, external equity is no longer taxed more heavily than internal equity. This removes the tax barrier on the transfer of capital between firms, thereby enhancing the dynamics of the capital market and an efficient allocation of capital.

Owner-occupied housing and the self-employed

The proposals raise the costs of equity investments in owner-occupied housing and by the self-employed. There are two reasons for this. The first is the elimination of the wealth tax which removes the tax advantages of the wealth-tax exemption on business equity for the self-employed and of the valuation of housing wealth at only 60%.

The second reason is that owner-occupied housing and the self-employed are taxed in box I whereas the alternative investment of the equity (an investment in debt) is subject to tax to box III. Hence, the costs of debt and equity are no longer treated symmetrically. The nominal costs of debt remain deductible at progressive tax rates (in box I). The alternative investment of the equity capital on the capital market, in contrast, is taxed at a proportional rate of only 25% on a presumptive return of 4%.

Financing owner-occupied residences and investments of self-employed with equity rather than debt is thus

Table 6 Cost of capital under proposals

	Equity	of which: new shares	retained earnings	Debt
<i>With average marginal rates</i>	<i>in %</i>			
Corporations	5.9	6.1	5.9	3.0
Unincorporated businesses	4.7	–	–	2.3
Owner-occupied dwellings	3.5	–	–	2.3
<i>With high marginal tax rates</i>				
Corporations	5.9	6.1	5.9	3.0
Unincorporated businesses	5.8	–	–	1.5
Owner-occupied dwellings	4.0	–	–	1.5
<i>Tax exempt institution</i>				
Corporations	5.9	6.1	5.9	3.0

discouraged, as is the case with corporate investments. Especially households with high incomes face a substantial incentive to finance investments in owner-occupied housing and their own firm with debt and to invest their equity in assets that can be placed in box III. These transactions result in a loss of tax revenues because taxable income is shifted from box I to box III (in which the tax rates are lower and income is taxed at a presumptive return of only 4%).

Conclusions

The most fundamental proposal in the cabinet white paper 'Taxation in the 21st century' is the replacement of the comprehensive income tax on interest and dividend and the wealth tax by a schedular tax on a presumptive return on wealth. The tax of 25% on a presumptive return of 4%, suggested by the cabinet, implies a tax of 1% on the value of wealth (in excess of an exemption). This reform increases the after-tax rate of return on debt claims for many investors, especially for traditional investors with high incomes from other sources, and raises the required yields on other investment options of these investors. Moreover, it reduces the relative tax advantage of institutional savings.

Unlike the present income tax, which does not tax capital gains, the proposed tax on the presumptive return on capital applies the same effective tax rate on interest, dividend and capital gains. This eliminates the tax incentive for investors facing high marginal personal tax rates to borrow and to invest the money in shares that generate capital gains. Investors with high labor incomes no longer have a stronger tax incentive than other investors to invest in shares rather than debt claims. The equal tax treatment of dividends and capital gains implies that externally raised equity of corporations is hardly discriminated any more relative to retained earnings. This facilitates the transfer of capital between companies and promotes the dynamics of the capital market.

By treating debt and equity the same at the personal level, the tax discrimination of equity relative to debt at the corporate level is intensified because the tax disadvantage of equity at the corporate level is no longer compensated by the tax advantage at the personal level (i.e. the exemption of capital gains). Shares of corporations that can turn to foreign shareholders and institutional investors for their equity capital will partially be sold to these investors.

The same kind of distortion in favor of debt is created for individuals investing in unincorporated businesses and owner-occupied housing. They will find it less attractive to finance their investments with equity if the tax rate in box III is 25% and the presumptive return is 4%. This is especially so for those who are subject to a high marginal tax rate in box I. Hence, labor income will continue to affect financial decisions. The tax incentive to finance with debt and invest equity elsewhere originates in the difference between the tax rate in box I (where actual nominal inter-

est payments, including the inflation premium, are deductible) and the proportional tax rate in box III (in which only the presumptive return of 4% is taxed).

References

- CPB, 1996, *Immateriële investeringen in Nederland*, CPB Working Paper 86.
 King, M. and Fullerton, D., 1984, *The taxation of income from capital*, the University of Chicago Press, Chicago.
 Ministry of Finance, 1997, *Taxation in the 21st century, an exploration* (only in Dutch), Sdu Publishers, The Hague.
 Bovenberg, Lans and Rele, Harry ter, 1998, *Evaluating the proposals to reform Dutch capital taxation*, CPB research memorandum (forthcoming).

Notes

- ¹ This article is a shorter version of a forthcoming research memorandum (see Bovenberg and ter Rele (1998)), which elaborates on the applied methodology and assumptions.
² Two investment strategies are distinguished, namely traditional and innovative strategies. Traditional investors employ a debt claim as their alternative investment. Innovative investors, in contrast, invest in a so-called capital growth fund, which transforms interest income into capital gains. For more details, see the first two paragraphs of the section on the present tax system.
³ In the case of the owner-occupied housing these allowances are the relatively low imputed rental value, the full nominal (rather than real) deductibility of interest payments, and the favorable taxation of housing wealth. For the self-employed, these tax benefits are an immediate expensing allowance, accelerated depreciation, nominal (rather than real) deductibility of interest payments, and favorable wealth taxation of small-business equity.